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CLAIMS

- 1. A method for reducing the formation of a byproduct polypeptide containing an O-acetylserine residue in place of a serine residue by adding at least one of histidine, methionine or glycine to the medium in a method for producing a polypeptide containing a serine residue by culturing transformed cells.
- 2. A method for producing a polypeptide containing a serine residue by culturing transformed cells, characterized by reducing the formation of a byproduct polypeptide containing an O-acetylserine residue in place of a serine residue by adding at least one of histidine, methionine or glycine to the medium.
 - 3. The method as defined in Claim 1 or 2 wherein the host cell is a prokaryotic cell or an eukaryotic cell in a method for producing a polypeptide containing a serine residue by culturing transformed cells.
 - 4. The method as defined in Claim 3 wherein the host cell is a microorganism.
 - 5. The method as defined in Claim 4 wherein the microorganism is Escherichia coli.
 - 6. The method as defined in any one of Claims 1 to 5 wherein the molecular weight of the polypeptide containing a serine residue is about 1000 to 20000.
 - 7. The method as defined in any one of Claims 1 to 6 wherein the polypeptide containing a serine residue is an atrial natriuretic peptide.

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8. The method as defined in Claim 7 wherein the atrial natriuretic peptide is human atrial natriuretic peptide.

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